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was 14.10, 14.05 for LF, and 14.02 for PNF. Both LF and PNF were dominated by CCH. Sensitivity analysis confirmed the model was sensitive to changes in clinical efficacy. Cost-effectiveness acceptability curves indicated that CCH was most likely to be cost-effective across a wide range of willingness to pay, including values over $100,000 per QALY gained. **CONCLUSIONS:** CCH was less expensive and was associated with slightly more QALYs than LF and PNF for treatment of Dupuytren's contracture.

PMS30

COST-EFFECTIVENESS OF BISPHOSPHONATES IN REDUCING HIP FRACTURES IN THE UNITED STATES

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OBJECTIVES: The cost of hip fractures associated with osteoporosis have become a growing burden on the US health care system. Cost-effective treatments are needed to prevent hip fractures in postmenopausal women with osteoporosis and reduce the amount of resources consumed by these preventable events. The objective of this study was to develop a decision tree model to assess the cost-effectiveness of four treatment options: alendronate, risedronate, ibandronate and a "no treatment group" for the prevention of hip fractures. **METHODS:** A decision tree model was developed from the third-party payer perspective using published efficacy results from randomized controlled trials. Patients were assumed to have osteoporosis, aged ≥ 65 years, be fully adherent and unable to change or discontinue medication therapy. The incidence of hip fracture was estimated from the literature. Medication costs were assigned from published wholesale acquisition costs (WAC) by First DataBank. The mean cost of hip fractures and all direct costs associated with 12-month post-fracture treatment were estimated from the literature. All costs were adjusted to 2011 dollars. **RESULTS:** Alendronate 70 mg once weekly dominated the "no treatment" and the ibandronate treatments. The risedonrate 35 mg to alendronate 70 mg incremental cost-effectiveness ratio (ICER) demonstrated that for every $469,553 spent one additional hip fracture would be avoided. These results were consistent throughout the one-way sensitivity analysis, which varied the cost per hip fracture and the efficacy of each medication. When the incidence of hip fracture was assumed to be 3.57%, risedronate also dominated the" no treatment" and ibandronate groups. **CONCLUSIONS:** Alendronate 70mg once weekly was dominate in preventing hip fractures compared to risedonrate, ibandronate and no treatment. The risedronate to alendronate ICER demonstrated that the cost to avoid one hip fracture was $469,553 – typically beyond most payers' willingness to pay.

PMS31

COST-EFFECTIVENESS ANALYSIS OF GOLIMUMAB FOR THE TREATMENT OF RHEUMATOID ARTHRITIS

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OBJECTIVES: Rheumatoid arthritis (RA) affects ~1.3 million Americans, accounting for 9 million physician visits and >250,000 hospitalizations annually. Drug therapy is costly but essential. This study evaluates the cost-effectiveness of golimumab, a recently approved TNF-α inhibitor (TNF-I) compared with existing agents (infliximab, etanercept, adalimumab), when given in combination with methotrexate (MTX) from a third-party payer perspective. **METHODS:** A Markov model was constructed to follow a hypothetical cohort of 10,000 patients with active RA who received one of the four TNF-I and MTX across patient life-time. The primary effectiveness outcomes were the American College of Rheumatology (ACR)-20 response rates mapped to health assessment questionnaire-scores to derive quality-adjusted life-years (QALYs). ACR-20 rates were derived from a systematic review of efficacy trials. Long-term drug withdrawal rates were derived from observational studies. Data for drug, administration, monitoring, toxicity and RA-related direct costs were derived from the literature. Incremental costs (2011 US$) per QALY were compared between TNF-Is. One-way and probabilistic sensitivity analysis (PSA) techniques were employed to examine effects of various assumptions and parameter uncertainty. **RESULTS:** Golimumab+MTX generated the highest per-person QALYs (3.75 QALY), whereas infliximab+MTX strategy generated the least QALYs (3.57). Infliximab+MTX resulted in the least direct costs of $317,455 over the patient's life-time compared to etanercept+MTX ($324,855), adalimumab+MTX ($323,503) and golimumab+MTX ($324,159). The base-case incremental cost-effectiveness ratios (ICERs) foretanercept+MTX, adalimuamab+MTX, and golimumab+MTXcompared to infliximab+MTX were $69,211, $44,465 and $38,255/QALY, respectively. Golimumab+MTX dominated etanercept+MTX, while the ICER for golimumab+MTX vs adalimumab+MTX was $16,729/QALY. In one-way sensitivity analyses, these results were robust to a range of assumptions except for dosing of infliximab and long-term withdrawal rates. In the PSA, the probability of golimumab being cost-effective at the commonly accepted $50,000/QALY threshold was 0.29. **CONCLUSIONS:** Golimumab appears to be a cost-effective treatment option for RA compared to existing TNF-Is.

PMS32

THE COST EFFECTIVENESS OF CELECOXIB VERSUS NSAIDS+PPI IN THE TREATMENT OF OSTEOARTHRITIS IN ALGERIA; AN UPDATE TO THE NICE MODEL USING DATA FROM THE CONDOR TRIAL

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OBJECTIVES: Nonsteroidal antiinflammatory drugs (NSAIDs) plus a proton pump inhibitor (PPI) are in widespread use for rheumatic diseases in Algeria, but can cause peptic ulcers and gastrointestinal bleeding and perforation. The National Institute for Health and Clinical Excellence (NICE) health economic model for assessing the cost-effectiveness of celecoxib compared to multiple NSAIDS+PPI in the treatment of osteoarthritis has been updated using new adverse event (AE) risks from the CONDOR trial. In light of this new information, this study aimed to evaluate the incremental cost-effectiveness ratio (ICER) of celecoxib compared to different NSAIDS +PPI. **METHODS:** The NICE model was adapted for this study to update the relative risks of adverse events; using data from the CONDOR trial for patients above 65yrs. Patients could initiate treatment with celecoxib, NSAIDs (diclofenac, naproxen, ibuprofen) plus omeprazole. Conditional probabilities of the model were obtained from published clinical trials and effectiveness measure was the Quality-Adjusted life years gained (QALY). The analysis was conducted from the healthcare payer's perspective. Resource use and costs were obtained from official Algerian databases. Probabilistic sensitivity analysis (PSA) was performed and acceptability curves were constructed. **RESULTS:** Celecoxib showed on the six-months period lower expected costs per patient (US$422.84) compared to naproxen+PPI (US$445.79) and ibuprofen+PPI (US$775.11). The lowest expected costs resulted for diclofenac+PPI (US$257.10). On the other hand, celecoxib was associated with higher effectiveness (0.398 QALYs), followed by ibuprofen+PPI (0.393 QALYs) and naproxen+PPI (0.392 QALYs). Likewise, celecoxib has an ICER of US$343.81 per QALY compared to diclofenac which is below 1 GDP per capita for Algeria (US$7,300). Acceptability curves showed the same results with a mean of 65.5% of certainty. **CONCLUSIONS:** (DISCUSSION): The results suggest that when new AE risks are used, celecoxib remains a cost-effective treatment for OA when compared to diclofenac plus a PPI and cost-saving when compared to naproxen+PPI or ibuprofen+PPI.

PMS33

COST-EFFECTIVENESS AND BUDGET IMPACT ANALYSIS OF VISCOSUPPLEMENTATION WITH ORTHOVISC™ (HYALURONAN) IN KNEE OSTEOARTHRITIS, FROM THE BRAZILIAN PRIVATE HEALTH CARE SYSTEM PERSPECTIVE

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OBJECTIVES: Osteoarthritis is a major cause of musculoskeletal pain and inability to work. Evidence shows that clinical improvement after viscosupplementation (VS) is able to delaying the average time until total knee arthroplasty (TKA) indication. This study aimed to conduct cost-effectiveness and budget impact analysis (BIA) of viscosupplementation with Orthovisc™ (Hyaluronan) versus conservative treatment in Kellgren & Lawrence(K&L) grades II and III knee osteoarthritis (KOA) from the Brazilian private health care system perspective. **METHODS:** A 3-year time horizon Markov simulation model was developed to project costs and outcomes associated to KOA progression. Patients could start in 'Orthovisc™ Treatment' (conservative treatment + Orthovisc™) or 'Conservative Treatment' states and then transit (6-month cycle duration) in states 'TKA', 'Post-operative' and 'Death' according to transition probabilities extracted from systematic review. Only direct medical costs were considered and collected from Brazilian private official databases. Outcome was expressed as 'avoided TKA procedure'. BIA was developed for a hypothetical private health insurance cohort of 10,000 patients over 50 years. Univariate sensitivity analyses were performed for main parameters. A 5% annual discount rate was applied for costs and benefits. **RESULTS:** For a hypothetical 1000 patient's cohort in a 3-year time horizon, 34TKA were performed in Orthovisc™ group versus 164TKA in conservative treatment group, avoiding 130 TKA procedures. Total costs per group were 17,367,259BRL and 17,494,500BRL for Orthovisc™ and conservative treatment groups, respectively, with an incremental cost of -127,241BRL. Sensitivity analysis showed cost-saving results for years 2 and 3. BIA showed savings of 180,401BRL for the private health insurance and 99TKA avoided in a 3-year time horizon. **CONCLUSIONS:** Viscosupplementation treatment, based on a Markov simulation model using Orthovisc™ data, in K&L grades II and III KOA showed to be cost-saving regarding avoided TKA in a 3-year time horizon over conservative treatment at Brazilian private health care system, leading to reduction in costs and surgical procedures.

PMS35

THE COST-EFFECTIVENESS OF PEGLOTICASE IN THE TREATMENT OF REFRACTORY CHRONIC GOUT

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OBJECTIVES: Refractory Chronic Gout (RCG) affects approximately 4% of patients with gout. It is characterized by failure to achieve normal serum uric acid levels or adequately control gout signs and symptoms with xanthine oxidase inhibitors at the maximum medically appropriate dose, or by contraindication to the use of these drugs. Pegloticase was recently launched in the US for treatment of RCG. **METHODS:** We developed a two-part sequential model: 1) the first 6 months represented as a decision tree; and 2) the remaining years as separate empirical forecasts. We modeled the severity of RCG as a combination of flares/year and tophi status. We used data from two replicate, randomized, double-blind, placebo-controlled trials (C0405 and C0406), which were conducted between June 2006 and October 2007 in 56 rheumatology practices. The comparator group is placebo. To model disease progression, we employed a vector autoregression methodology to approximate Markov Chain transition probabilities. We estimated utility regressions from NHWS and use a blended cost of $2600/vial. **RESULTS:** For a 20-year time